

## Abstract of the Disclosure

A purpose of a high-speed signal transmission system of the present invention is to pass a high-speed digital signal through an outside-chip line exchanging a signal with a high speed LSI chip with a band higher than GHz. The high-speed signal transmission system of the present invention has a configuration of: insertion of a circuit for feeding back received information and adjusting a waveform at a sending side based on genetic algorithm; a device structure for automatically performing pump up and pump down of a transistor carrier; a transmission line of a wiring out of a transistor; and elimination of a common power source of a circuit.